

PROJECT DESCRIPTION  
GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF OPTICOM FIRE PRE-EMPTION DETECTOR TO THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 213 (WASHINGTON AVE) AND MD 291 (MORGNEC ROAD) IN KENT COUNTY.

INTERSECTION OPERATION

AN EXISTING CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL REMAIN AT THIS LOCATION. THE INTERSECTION OPERATES IN A FULLY ACTUATED MODE USING 8 NEMA PHASES. THE LEFT TURN PHASING ALONG NORTHBOUND AND SOUTHBOUND MD 213 OPERATES AS EXCLUSIVE/PERMISSIVE PHASING. THE LEFT TURN PHASING ALONG EASTBOUND AND WESTBOUND MD 291 (MORGNEC ROAD) OPERATES AS EXCLUSIVE/PERMISSIVE PHASING. FIRE PRE-EMPTION PHASING SHALL BE ADDED FOR NORTH AND SOUTHBOUND MD 213, AND ADDED FOR EAST AND WESTBOUND MD 291 (MORGNEC ROAD) APPROACHES.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. ROBERT L. KIEL, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 810-3240  
MR. WM NORRIS EMBERT, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (410) 810-3270  
MR. BARRY CLOTHIER, DISTRICT UTILITIES ENGINEER  
PHONE: (410) 810-3275  
MR. TERRY O. WRIGHT, ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 810-3250  
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

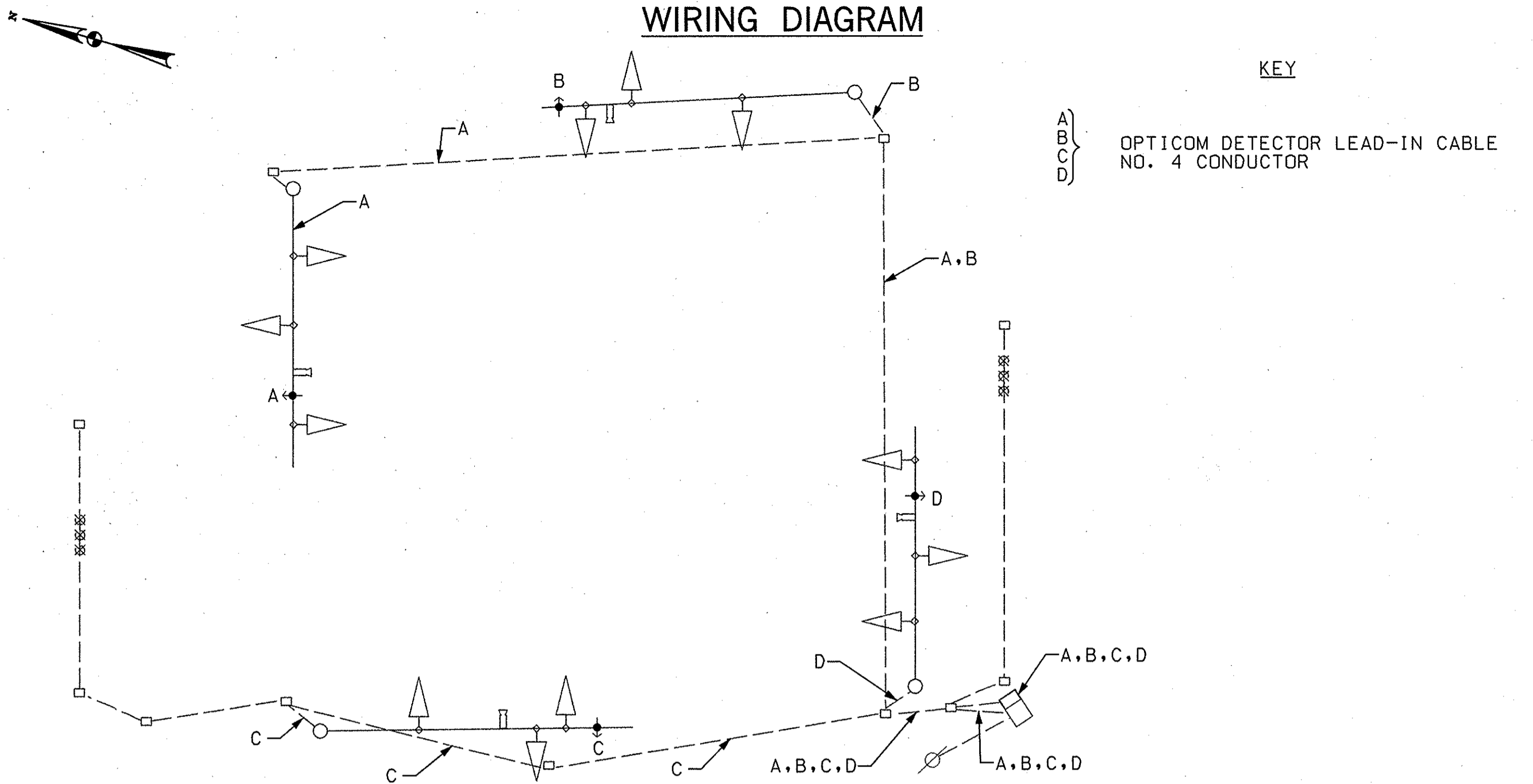
ITEM NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	1
8059	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 76	EA	1
8061	OPTICOM NO. 721 DETECTOR EYE	EA	4
8080	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE	LF	770
8021	REM & DISPOSE MAT & EQUIP PER ASSIGN	EA	1

C. ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 AND 5	←GR	←GR	R	←GR	←GR	R	R	R	R	R	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6												
PHASE 1 AND 6	←GG	←GG	G	R	R	R	R	R	R	R	R	R
1 AND 6 CHANGE	←YG	←YG	G	R	R	R	R	R	R	R	R	R
PHASE 2 AND 5	R	R	R	←GG	←GG	G	R	R	R	R	R	R
2 AND 5 CHANGE	R	R	R	←YG	←YG	G	R	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3 AND 7	R	R	R	R	R	←GR	←GR	R	←GR	←GR	R	
3 AND 7 CHANGE TO 3 AND 8, 4 AND 7, OR 4 AND 8												
PHASE 3 AND 8	R	R	R	R	R	R	R	R	R	←GG	←GG	G
3 AND 8 CHANGE	R	R	R	R	R	R	R	R	R	←YG	←YG	G
PHASE 4 AND 7	R	R	R	R	R	←GG	←GG	G	R	R	R	
4 AND 7 CHANGE	R	R	R	R	R	←YG	←YG	G	R	R	R	
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	

	1	2	3	4	5	6	7	8	9	10	11	12
FIRE PRE-EMPTION MD 213												
PRE-EMPTION PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R
PRE-EMPTION CLEARANCE PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R
PHASE 2 AND 6 NORMAL OPERATION	G	G	G	G	G	G	R	R	R	R	R	R
FIRE PRE-EMPTION MD 291												
PRE-EMPTION PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	G
PRE-EMPTION CLEARANCE PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	G
PHASE 4 AND 8 NORMAL OPERATION	R	R	R	R	R	R	G	G	G	G	G	G

TOD No: AT355-17  
SHA: KE388A51/B51

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 213 AT MD 291 (MORGNEC AVENUE)

CHESTERTOWN, MARYLAND

GENERAL INFORMATION PLAN

SCALE N.T.S. DATE 09/20/05 CONTRACT NO. AT3555185

DESIGNED BY C.FLEMING COUNTY KENT  
DRAWN BY D.BROWN LOGMILE 14021301.32  
CHECKED BY S.RENZI T.I.M.S. NO. G844  
F.A.P. NO. TOD NO.

DRAWING NO. TS39E - 2 OF 2 SHEET NO. 11 OF 13

SABRA, WANG & ASSOCIATES, INC.  
1504 JOH AVENUE  
SUITE 160  
BALTIMORE, MD 21227  
(410) 797-8564  
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PLOTTED: TUESDAY, SEPTEMBER 20, 2005 AT 11:19 AM  
FILE: RA\2002\12 2001-12C\TASK 59\DOWN\SIGNAL\PSG-N006-G844.DGN